No. 83-1429

IN THE
SUPREME COURT OF THE UNITED STATES
October Term, 1983

ALABAMA POWER CO., *et al.*,
Petitioners,
v.
SIERRA CLUB, *et al.*,
Respondents.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

MOTION FOR LEAVE TO FILE AND BRIEF OF AMICI CURIAE ARIZONA ELECTRIC POWER COOPERATIVE, INC., *ET AL.*, IN SUPPORT OF THE PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

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MOTION FOR LEAVE TO FILE AMICI CURIAE BRIEF

Arizona Electric Power Cooperative, Inc., Arizona Power Authority, Arizona Public Service Company, Colorado-Ute Electric Association, Inc., El Paso Electric Company, Nevada Power Company, Pacific Power & Light Company, Platte River Power Authority, Public Service Company of Colorado, Public Service Company of New Mexico, San Diego Gas & Electric Company, and Sierra Pacific Power Company hereby move for leave to file a Brief of Amici Curiae in support of the petitioners in this case. The proposed brief accompanies this motion. The amici sought and obtained the consent of petitioners Alabama Power Co., *et al.*, respondents Kennecott, American Petroleum Institute, Tennessee Valley Authority, and the Solicitor General of the United States on behalf of the respondent Environmental Protection Agency. However, counsel for the respondents Sierra Club, Natural Resources Defense Council, the Commonwealths of Pennsylvania and Massachusetts and the states of New York, New Hampshire, Rhode Island and Vermont have withheld their consent.

Consent to the filing of this brief by amici City of Anaheim, City of Burbank and City of Glendale, political subdivisions of the State of California, and City of Colorado Springs, a political subdivision of the State of Colorado, is not necessary under Rule 36.4, Rules of the Supreme Court of the United States, since they are political subdivisions of the states of California and Colorado, respectively, and this brief is sponsored by their authorized law officers. See proposed brief at 9.

These amici are interested in this case because they are affected by the Environmental Protection Agency regulations implementing Section 123 of the Clean Air Act which were largely invalidated by the court below. For a more detailed statement, see the following brief at 2-3. The amici believe that a discussion of the effect of the lower court's decision in the Western states, where the fossil fuel-fired

electric generating facilities owned, operated and managed by these amici are located, will assist this Court in the proper resolution of whether the petition for the writ of certiorari should be granted. If for any reason this motion is denied, we ask that this Court accept for filing the brief which follows on behalf of the four political subdivisions of the states of California and Colorado which need not seek leave to file the brief under Rule 36.

May 29, 1984.

Respectfully submitted,

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TABLE OF CONTENTS

TABLE OF AUTHORITIES

No. 83-1429

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INTERESTS OF THE AMICI CURIAE

Arizona Electric Power Cooperative, Inc., Arizona Public Service Company, City of Anaheim Public Utilities Department, City of Burbank Public Service Department, City of Colorado Springs Department of Public Utilities, City of Glendale Public Service Department, Colorado-Ute Electric

Association, Inc., El Paso Electric Company, Nevada Power Company, Pacific Power & Light Company, Platte River Power Authority, Public Service Company of Colorado, Public Service Company of New Mexico, San Diego Gas & Electric Company, and Sierra Pacific Power Company own, operate and manage fossil fuel-fired electric generating facilities in the states of Arizona, California, Colorado, New Mexico, Nevada, Texas and Utah. Arizona Power Authority distributes electricity generated by some of those facilities. These amici curiae are directly affected by the regulations at issue in this case, which were, in large measure, invalidated by the Court of Appeals for the District of Columbia Circuit.

In contrast to 64 of 67 of the individual utility petitioners, [1] all of the generating facilities of these amici, many of which burn low sulfur Western coal, are located in seven Western states renowned for their mountainous topography. Many of these generating facilities were built in remote areas of complex, elevated terrain. To prevent harsh economic discrimination against such facilities, in favor of their identical flatland counterparts, through an overly rigid and arbitrary application of Section 123 of the Clean Air Act, the Environmental Protection Agency (EPA) specially tailored two of the regulations implementing this Section for facilities located in mountainous areas. [2] These provisions, both of which were invalidated by the court below, would

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[1] The petitioners Salt River Project Agricultural Improvement and Power District, Southern California Edison Company and Tucson Electric Power Company have interests in generating facilities in Arizona, California, Nevada and New Mexico.

[2] The first of these provisions permits additional stack height credit in calculating a source's emissions limits when its "modeled" plume theoretically creates excessive concentrations of pollutants by hitting downwind hills and mountains. *See* 47 Fed. Reg. 5864, 5866-67, 5869 (1982); Pet. App. at 90a-94a, 100a. The second provision involves the definition of the statutory term "nearby terrain obstacles" which cause excessive concentrations of pollutants as a result of atmospheric downwash, wakes or eddies. *See* 47 Fed. Reg. at 5865, 5868-69; Pet. App. at 86a, 100a.

have equalized the emissions limits for identical facilities without regard to whether the facilities were located in mountainous or flat terrain. As a result of the court's rejection of these two rules, however, some of the generating facilities of these amici, which are located in mountainous or hilly areas, now may be subjected to emissions limits *ten times more stringent* than those for identical facilities located in flat regions. The amici submit that the petition for the writ of certiorari filed by Alabama Power Company and the other electric utilities should be granted to rectify the discriminatory impact sanctioned by the lower court's opinion.

ARGUMENT

I. Introduction

Section 123 of the Clean Air Act [3] requires the states to use good engineering practice (GEP) stack height assumptions when establishing emissions limitations under Section 110 of the Act. [4] Section 123 grants the Administrator of EPA discretion to define GEP stack height, based upon two statutory criteria. First, the statute provides that GEP height is to be the height necessary *to insure* the prevention of excessive concentrations of emissions in the vicinity of the source due to downwash, wakes and eddies created by the source, nearby structures or nearby terrain obstacles as determined by the Administrator. Second, GEP is not to exceed two and one-half times the height of the source unless the source demonstrates, to the Administrator's satisfaction, that a greater height is GEP.

The Administrator exercised that discretion on February 8, 1982 when he issued final regulations implementing Section 123. [5] On October 11, 1983, the Court of Appeals for the District of Columbia Circuit rejected the Administrator's exercise of discretion under Section 123 and

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[3] 42 U.S.C. § 7423 (Supp. V 1981).

[4] 42 U.S.C. § 7410 (Supp. V 1981).

[5] *See* 47 Fed. Reg. 5864, *et seq.* (1982); Pet. App. 80a-102a.

invalidated virtually every significant portion of that rulemaking. [6]

These amici agree with petitioners and respondent Kennecott that the court below impermissibly substituted its judgment for that of the Administrator when it set aside these regulations. Moreover, the court's rejection of the plume impaction credit and the Agency's definition of "nearby terrain obstacles" have particular significance to these amici since their generating facilities are located in Western states where mountainous topography is frequently encountered.

II. THE PLUME IMPACTION CREDIT IS NECESSARY TO AVOID HARSH DISCRIMINATION AGAINST SOURCES LOCATED IN MOUNTAINOUS AREAS.

Plume impaction occurs when a plume of exhaust gases emitted from a stack hits a higher hill or mountain downwind from the stack. Under stable atmospheric conditions, the plume can hit the mountain before it has dispersed, causing high concentrations of pollutants on the mountainside. [7] In reality this impaction does not usually occur because the source's stacks are physically higher than these nearby areas of elevated terrain. In "modeling" plume impaction potential, however, it is possible to have theoretical impaction where none in fact exists if the actual stack height is ignored. In other words, calculation of GEP stack height without benefit of a height credit sufficient to avoid this false impaction will result in a "modeled" plume impaction. Establishment of emissions limits for the source on the basis of the modeled plume impaction will require emissions limi-

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[6] *Sierra Club, et al. v. EPA*, 719 F.2d 436 (D.C. Cir. 1983).

[7] *See* 719 F.2d 436, 452; Pet. App. at 31a-32a.

tations *ten times more stringent* than would be necessary if the identical facility were surrounded by flat terrain. [8]

The unreasonableness of this result was acknowledged by EPA, and, in October 1981, the Agency determined that sources should receive stack height credit when *modeled* plume impaction produced concentrations high enough to violate an NAAQS or applicable PSD increment. [9] The wisdom of this rule and its policy did not go unnoticed by the court below. Indeed, the court admitted that from a policy perspective there was much to commend EPA's adoption of the plume impaction rule. Moreover, the court acknowledged that without the plume impaction rule, the law "discriminates harshly against utilities located in mountainous terrain, for it will require them to emit far less than their flatland counterparts." 719 F.2d at 455; Pet. App. at 38a. Then, after conceding that Congress did not "focus on, and resolve" the problems created by plume impaction, the court inexplicably sanctioned the harsh geographic discrimination by invalidating the plume impaction credit. 719 F.2d at 455, 456; Pet. App. at 37a, 39a.

Although the court described its holding as not "utterly irrational", this apologetic conclusion stands in stark contrast to the rulemaking record before the Agency which establishes that the expenditure of *billions of dollars* will be required if states are forced to establish emissions limits based upon false plume impactions. [10]

The elimination of the plume impaction rule not only countenances totally irrational economic discrimination

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[8] *See, e.g.*, Environmental Research and Technology, Analysis of EPA Proposed Regulations on Stack Height Limitation (March 1979) (submitted as Appendix C to Comments of the Utility Air Regulatory Group (March 1979)) at 14-20; Pet. App. 116a-122a.

[9] *See* 719 F.2d at 452; Pet. App. at 32a; 46 Fed. Reg. 49814, 49815—16 (1981).

[10] *See* Comments of the Utility Air Regulatory Group (June 16, 1981) at 37-38; Comments of the Southern Company (May 29, 1981) at 1-2.

against existing generating facilities located in mountainous areas, in favor of identical facilities located in flat terrain, it also severely restricts the siting of new plants throughout the Western states. The irrationality of the court's decision is further evidenced by the court's own admission that under the rejected rule emissions from facilities benefiting from the plume impaction credit would still be *equal to or even less* than an identical facility located in flat terrain. [11]

The generating facilities of these amici are spread throughout the states of Arizona, California, Colorado, New Mexico, Nevada, Texas and Utah. Many are located in valleys, on desert plateaus dotted with higher mesas, or near hills and mountains. Although their stacks are actually high enough to avoid plume impaction on these areas of elevated terrain, calculation of emissions limits at a GEP height which models a fake plume impaction will mandate retroinstallation of additional costly emissions control devices, even though those additional controls would not be necessary if the facility were in a flat area. The legislative history of Section 123 is absolutely devoid of evidence that Congress intended to impose this harsh discrimination against existing facilities located in these mountainous areas. Yet, that is the result expressly sanctioned by the court below. These amici submit that this senseless discrimination cannot also be sanctioned by this Court. The petition for the writ of certiorari should be granted to correct this injustice and to reinforce the sanctity of the Administrator's exercise of discretion.

III. EPA's DEFINITION OF "NEARBY TERRAIN OBSTACLES" IMPLEMENTS SECTION 123'S STATUTORY DIRECTIVE.

In defining the term "nearby" for purposes of establishing the existence of concentrations of emissions caused by downwash, wakes or eddies, EPA drew a distinction between

[11] 719 F.2d at 452 n.4; Pet. App. at 32a.

"nearby structures" and "nearby terrain obstacles". Based upon extensive data, [12] the Agency defined "nearby structures", characterized by regular sizes and shapes, by a formula: "up to five times the lesser of the height or width dimension of a structure but not greater than 0.8 km (one half mile)." 47 Fed. Reg. at 5869; Pet. App. at 100a.

Naturally occurring terrain obstacles are, however, generally larger than buildings and do not have regular sizes and shapes. Because of these geometric irregularities, EPA found that unacceptable downwash from terrain obstacles occurs at greater distances from the source and that a rigid formula simply could not satisfy the statutory directive to "insure" against excessive concentrations as a result of downwash, wakes and eddies created by nearby terrain obstacles. Accordingly, the Agency defined "nearby terrain obstacle" as one that is actually demonstrated through a fluid model or field study to be close enough to the source to cause at least a 40 percent increase in local ambient emissions concentrations due to downwash. [13]

The court affirmed EPA's definition of "nearby structures", but rejected its definition of "nearby terrain obstacles" even though it conceded that the Agency's demonstrable approach to defining terrain obstacles "might make a good deal of sense. . . ." 719 F.2d at 444; Pet. App. at 15a. Moreover, the court also acknowledged that the rejected definition "would certainly be rational" because the fluid model or field study would actually demonstrate the occurrence of excessive concentrations resulting from downwash, wakes or eddies created by the terrain obstacle. *Id.* Nevertheless, the court refused to follow the good sense, rational approach adopted by EPA because it believed Congress intended a strict interpretation of Section 123 and

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[12] *See* GEP Guidelines at 5-15, 24-26.

[13] 47 Fed. Reg. at 5865, 5868-69; Pet. App. 86a, 100a; GEP Guidelines at 47-48.

that it "sought to discourage utilities from locating in hilly terrain. . . ." 719 F.2d at 445; Pet. App. at 17a. [14]

In according overriding significance to a strict and not "utterly nonsensical" interpretation of Section 123, [15] the court completely overlooked Congress' statutory directive to EPA *to insure* against the occurrence of excessive concentrations of emissions resulting from downwash, wakes and eddies caused by nearby terrain obstacles. The Agency's rational, but rejected definition, implemented this directive by actually identifying through demonstrations those terrain obstacles causing the forbidden excessive concentrations. Instead of this precise and accurate determination, the court opted for a rigid formula which "could conceivably be used to give credit for the height of any obstacle upwind of the stack, even though the turbulence created in the wake of those obstacles could not possibly disrupt the plume." 719 F.2d at 444; Pet. App. at 16a. What is even more ironic, however, is that by limiting the definition of nearby terrain obstacles to those within one-half mile of the source, as is the case under the court-approved rigid formula, the court is defeating its perception of Congress' intent by encouraging sources to locate within one-half mile of large terrain obstacles!

It is not the intent of these amici to flaunt congressional intent by advantageously locating new facilities immediately adjacent to complex terrain simply because a court in the District of Columbia favors a rigid formula over demonstrable impacts upon air quality. These amici believe that Congress intended a definition of "nearby terrain obstacle" that "make[s] a good deal of sense", one that "would certainly be rational", not a reading that must be described by its author as not "utterly nonsensical".

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[14] Location of large electric generating facilities is a complex matter, dependent upon water, coal transportation availability and proximity, airshed qualities, and geological and archaeological criteria, just to mention a few.

[15] *See*, 719 F.2d at 445; Pet. App. at 16a.

The elimination of modeled emissions concentrations caused by terrain obstacles greater than one-half mile from the source is a costly result of the court's decision, particularly since existing stacks are physically high enough to avoid these concentrations. Here, as with plume impaction, the excessive concentrations will occur only in theory, not reality. Here, as with plume impaction, the economic cost resulting from the court's refusal to accept the Agency's exercise of discretion will be borne disproportionately by western utilities such as these amici. Here, as with plume impaction, certiorari is warranted to eliminate the harsh discrimination against the mountainous regions of the West and to reinstate the Agency's rational response to the statutory directives of Section 123 of the Clean Air Act.

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